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09/893,789	06/29/2001	Marcos Nogueira Novaes	YOR920010315US1	4577

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EXAMINER

LY, ANH

ART UNIT PAPER NUMBER

2162

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,789

Applicant(s)

NOVAES, MARCOS NOGUEIRA

Examiner

Anh Ly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) 18-21, 40-43 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 22-29, 44-45, and 47-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 04/13/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

1. This Office Action is response to Applicant's response filed on 04/13/2005.
2. Claims 48-55 are added
3. Claims 1-17, 22-29, 44-45 and 47-55 are pending in this application.

### ***Response to Arguments***

4. Applicant's arguments filed 04/13/2005 have been fully considered but they are not persuasive.

Applicant argued that, "Egger fails to teach or suggest constructing a N-dimensional coordinate space wherein N is the cardinality of collection of subject words." (Pages 16-18).

Egger teaches building a system with n-dimensional vector space for representing data including textual objects, which is collecting of subject words, in a database or a network for searching/retrieving (col. 5, lines 38-55 and abstract), and providing a user interface with two or three dimensional spatial orientation of data (abstract, col. 16, lines 12-35, col. 17, lines 38-48). The subject words of a textual object include words, phrases, terms, keywords, paragraphs or portions (col. 13, lines 50-67 and col. 14, lines 1-8; also col. 5, lines 38-55).

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-17, 22, 23-39, 44, 45 and 47-55 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,233,571 issued to Egger et al. (hereinafter Egger).

With respect to claim 1, Egger teaches constructing a N-dimensional coordinate space, wherein N is a cardinality of the collection of subject words (a collaborative Web research method comprising organizing a plurality of documents: col. 12, lines 40-45 in a N-dimensional space: col. 18, lines 32-40, based on a collection of subject of words: col. 5, lines 45-48 and col. 16, lines 4-12).

With respect to claim 2, Egger teaches traversing data block links leading to discovery of cross-subject affinities (traversing of document links in N-dimensional space with N is the number of subject word: col. 12, lines 40-62 and col. 13, lines 5-40).

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With respect to claim 3, Egger teaches determining a closeness of any two data blocks in said database (the sum of distances of the distance relationship of two point is defined as affities in Euclidean distance: col. 18, lines 32-45 and determining a closeness: col. 50, lines 24-27).

With respect to claim 4, Egger teaches wherein said determining is performed according to an equation comprising where  $D$  is a data block and  $p_1$ ,  $p_2$  are points in the  $N$ -dimensional space and  $S$  is a summation (In non-Euclidean distance of two points  $p_1$  and  $p_2$  in hyperspace and  $D$  is a Euclidean distance between two points: col. 18, lines 32-45).

With respect to claim 5, Egger teaches wherein affine documents are determined to be in closer proximity than non-affine documents in a mapping to  $N$ -space coordinates (two points in a hyperspace having a distance  $D$  in a Euclidean distance: col. 18, lines 32-45).

With respect to claim 6, Egger teaches wherein all dimensions of said  $N$ -dimension coordinate space are considered (a  $N$ -dimensional space of a web research system having a plurality of documents or pages; col. 12, lines 40-45 and col. 18, lines 32-40).

With respect to claim 7, Egger teaches wherein said data blocks comprise documents, said method further comprising building a term-by-document matrix and using all of the terms in  $N$ -dimensions in the coordinate space (web provider Yahoo is defined using term-by-document technique for indexing documents: col. 49, lines 15-25).

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With respect to claim 8, Egger teaches utilizing a column term in the term-by-document matrix as a vector (col. 49, lines 12-30)

With respect to claim 9, Egger teaches measuring a distance function between data blocks, wherein said distance function is representative of an affinity between two data blocks (col. 12, lines 63-67 and col. 13, lines 1-5).

With respect to claim 10, Egger teaches building a proximity list for each data block (fig. 4B and col. 24, lines 49-51).

With respect to claim 11, Egger teaches navigating through data blocks based on a content of said data blocks, said navigating being performed by selectively moving from one page to another without traversing a hypertext link (col. 48, lines 46-62).

With respect to claim 12, Egger teaches wherein said data blocks comprise any of Web pages, images, and database entries indexed such that each data block resides in a specific point in the N-dimensional coordinate space, and wherein a placement of the data blocks in the coordinate space is performed such that data blocks which are relatively closer to each other are related to a same subject (col. 12, lines 40-45).

With respect to claim 13, Egger teaches wherein the proximity list is ordered in ascending order of proximity, with a closest point being listed first (proximity indexing method to get order of the list: col. 13, lines 40-50).

With respect to claim 14, Egger teaches reordering the proximity list

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by changing a coordinate of a current location. (col. 13, lines 50-62).

With respect to claim 15, Egger teaches wherein the proximity list is changed when a current position is changed to a position of a visited data block (col. 13, lines 40-67).

With respect to claim 16, Egger teaches wherein a user selectively follows one of a link from a data block and follows an item in the proximity list, to navigate independently of links found in other data blocks (col. 15, lines 50-67 and col. 16, lines 12-35).

With respect to claim 17, Egger teaches wherein said data blocks are selectively traversable by using hypertext links and by not using hypertext links (col. 48, lines 46-62).

With respect to claim 22, Egger teaches constructing a coordinate system (a collaborative Web research including a plurality of documents in a N-dimensional space with a collection of subject words: col. 12, lines 40-45, col. 18, lines 32-40 and col. 5, lines 45-48 and col. 16, lines 4-12); and

mapping documents of said database into the coordinate system to determine a physical closeness of first and second documents of said database (the page or document or web page are determined by user: col. 6, lines 6-25, and mapping the coordinates into a space: col. 28, lines 2-5 and col. 6, lines 6-50).

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Claim 23 is essentially the same as claim 1 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 24 is essentially the same as claim 2 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 2 hereinabove.

Claim 25 is essentially the same as claim 3 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 3 hereinabove.

Claim 26 is essentially the same as claim 4 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 4 hereinabove.

Claim 27 is essentially the same as claim 5 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 5 hereinabove.

Claim 28 is essentially the same as claim 6 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 6 hereinabove.

Claim 29 is essentially the same as claim 7 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.



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Claim 30 is essentially the same as claim 8 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 8 hereinabove.

Claim 31 is essentially the same as claim 9 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 9 hereinabove.

Claim 32 is essentially the same as claim 10 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 10 hereinabove.

Claim 33 is essentially the same as claim 11 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 11 hereinabove.

Claim 34 is essentially the same as claim 12 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 12 hereinabove.

Claim 35 is essentially the same as claim 13 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 13 hereinabove.

Claim 36 is essentially the same as claim 14 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 14 hereinabove.

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Claim 37 is essentially the same as claim 15 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 15 hereinabove.

Claim 38 is essentially the same as claim 16 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 16 hereinabove.

Claim 39 is essentially the same as claim 17 except that it is directed to a system rather than a method, and is rejected for the same reason as applied to the claim 17 hereinabove.

With respect to claim 44, Egger teaches a unit for constructing a coordinate system (a collaborative Web research including a plurality of documents in a N-dimensional space with a collection of subject words: col. 12, lines 40-45, col. 18, lines 32-40 and col. 5, lines 45-48 and col. 16, lines 4-12); and a mapping unit for mapping documents of said database into the coordinate system to determine a physical closeness of first and second documents of said database (the page or document or web page are determined by user: col. 6, lines 6-25, and mapping the coordinates into a space: col. 28, lines 2-5 and col. 6, lines 6-50), wherein indexing said database is performed according to a collection of subject words, such that said coordinate system comprises an N-dimensional coordinate space, wherein N is a cardinality of the collection of subject words (col. 18, lines 32-40 and col. 16, lines 4-12; also see abstract, the indexing documents are created as a representation of data system by using generation algorithm, fig. 3H and col. 21, lines 30-67 and col. 22, lines 32-58).

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Claim 45 is essentially the same as claim 1 except that it is directed to a signal-bearing medium rather than a method, and is rejected for the same reason as applied to the claim 1 hereinabove.

Claim 47 is essentially the same as claim 44 except that it is directed to a signal-bearing medium rather than a method, and is rejected for the same reason as applied to the claim 44 hereinabove.

With respect to claim 48, Egger teaches wherein each data block represents a document and each said document is represented as a vector which has a position in the N-dimensional coordinate space of N subject words, such that a relationship is independent of any other document (col. 16, lines 4-12 and col. 18, lines 32-40 and col. 13, lines 1-15).

With respect to claim 49, Egger teaches wherein each data block represents a document and wherein a document can be added to the coordinate space without impacting a measurement of any other document (col. 6, lines 6-25 and col. 36, lines 18-40).

Claim 50 is essentially the same as claim 48 except that it is directed to a computer system rather than a computer-implemented method, and is rejected for the same reason as applied to the claim 48 hereinabove.

Claim 52 is essentially the same as claim 49 except that it is directed to a computer system rather than a computer-implemented method, and is rejected for the same reason as applied to the claim 49 hereinabove.

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With respect to claim 53, Egger teaches wherein a document can be added to the coordinate system without impacting a measurement of any other document (col. 6, lines 6-25 and col. 36, lines 18-40).

Claim 54 is essentially the same as claim 48 except that it is directed to a computer system rather than a computer-implemented method, and is rejected for the same reason as applied to the claim 48 hereinabove.

Claim 55 is essentially the same as claim 49 except that it is directed to a computer system rather than a computer-implemented method, and is rejected for the same reason as applied to the claim 49 hereinabove.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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### Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to (571) 273-4039. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or

**Primary Examiner Jean Corrielus (571) 272-4032.**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Any response to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, or faxed to: Central Fax Center (703) 872-9306

ANH LY   
JUN. 3<sup>rd</sup>, 2005

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER